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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/072,364
Filing Date: February 06, 2002
Appellant(s): SADOT, EMEK

Scott T Wakeman (Reg. No. 37,750)
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 06/02/10 appealing from the Office action mailed 01/05/10.

(1) Real Party in Interest

The examiner has no comment on the statement, or lack of statement, identifying by name the real party in interest in the brief.

(2) Related Appeals and Interferences

The following are the related appeals, interferences, and judicial proceedings known to the examiner which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal:

(3) Status of Claims

The following is a list of claims that are rejected and pending in the application:

Claims 1-54 are rejected in this application.

Claims 1-54 are pending in this application.

(4) Status of Amendments After Final

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

(5) Summary of Claimed Subject Matter

The examiner has no comment on the summary of claimed subject matter contained in the brief.

(6) Grounds of Rejection to be Reviewed on Appeal

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds of rejection (if any) listed under the subheading "WITHDRAWN REJECTIONS." New grounds of rejection (if any) are provided under the subheading "NEW GROUNDS OF REJECTION."

(7) Claims Appendix

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant's brief.

(8) Evidence Relied Upon

6,182,139 B1	Brendel	01-2001
6,185,619 B1	Joffe et al.	02-2001
6,658,479 B1	Zaumen et al.	12-2003
6,154,777	Ebrahim	11-2000
6,950,848 B1	Yousefi'zadeh	09-2005

6,249,801 B1	Zisapel et al.	06-2001
6,078,960	Ballard	06-2000
6,389,462 B1	Cohen et al.	05-2002
7,043,563 B1	Vange et al.	05-2006
6,304,913 B1	Rune	10-2001
7,174,390 B2	Schulter et al.	02-2007

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-54 are pending in this application.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-4, 6-9, 11, 15, 17, 24-29 and 32-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,182,139 B1 to Brendel in view of U.S. Pat. No. 6,185,619 B1 issued to Joffe et al.

As to claim 1, Brendel teaches a method of selecting a server to represent a virtual server hosted by a plurality of servers, comprising:

providing, by a load balancer not associated with the virtual server ("…Client-Side Load Balancer…" Col. 4 Ln. 63 – 67, Col. 5 Ln. 1 – 35, Ln. 55 – 64, Col. 6 Ln. 34 – 40, "…client-side dispatcher…" Col. 11 Ln. 1 – 18), values for one or more parameters ("…round trip time, or "latency"…" Col. 11 Ln. 14 – 18); and

selecting a server to provide data for the client, responsive to the values of the one or more parameters ("…(measure the round trip time, or "latency") to the intended servers and choose the fastest responding server..." Col. 11 Ln. 14 – 18), wherein the load balancer comprises a client-controlled load balancer that directly selects said one of the plurality of servers representing the virtual server based on said one or more parameters ("…load-balancer module in the client machine…make a server assignment…" Col. 5 Ln. 1 – 20, Ln. 55 – 56, "…client-side dispatcher…round trip time, or "latency"…" Col. 11 Ln. 1 – 18).

Brendel is silent with reference to providing, by a load balancer, values for one or more parameters, of two or more paths, each path defined between a point in a vicinity of a client accessing the virtual server and one of the plurality of servers representing the virtual server.

Joffe teaches providing, by a load balancer, values for one or more parameters, of two or more paths, each path defined between a point in a vicinity of a client accessing the virtual server and one of the plurality of servers representing the virtual server ("…round trip values for paths..." Col. 13 Ln. 1 – 31, "…a sequence of values

representative of the round trip time to-and-from every client site..." Col. 15 Ln. 9 – 60, Col. 16 Ln. 1 – 21).

It would have been obvious to one of ordinary skill in the art the time the invention was made to modify the system of Brendel with the teaching of Joffe because the teaching of Joffe would improve the system of Brendel by providing a technique for dynamically selecting appropriate server from which to retrieve data object for a user based upon the user's request, shortest network path, the capabilities and topology of the underlying network thus, efficiently using resources and optimally responding to user's request by reducing wait time (Joffe Col. 3 Ln. 37 – 54).

As to claim 2, Brendel teaches a method according to claim 1, wherein the load balancer and the client are in the same metropolitan area ("…Client-Side Load Balancer…" Col. 4 Ln. 63 – 67, Col. 5 Ln. 1 – 35, Ln. 55 – 64, Col. 6 Ln. 34 –40, "…client-side dispatcher…" Col. 11 Ln. 1 – 18).

As to claim 3, Brendel teaches a method according to claim 1, wherein the load balancer and the client are in the same local area network ("…Client-Side Load Balancer…" Col. 4 Ln. 63 – 67, Col. 5 Ln. 1 – 35, Ln. 55 – 64, Col. 6 Ln. 34 –40, "…client-side dispatcher…" Col. 11 Ln. 1 – 18).

As to claim 4, Brendel teaches a method according to claim 1, wherein the one or more parameters comprise at least one of a jitter, a round trip delay or a hop count ("...round trip time, or "latency"..." Col. 11 Ln. 14 – 18).

As to claim 6, Brendel teaches a method according to claim 1, wherein selecting the server comprises selecting, by a client-controlled load balancer, responsive to receiving identification of a virtual server requested by the client ("...URL..." Col. 5 Ln. 1 – 35).

As to claim 7, Brendel teaches a method according to claim 6, wherein selecting the server comprises selecting, by a client-controlled load balancer, responsive to receiving a connection establishment request from the client ("...connection..." Col. 5 Ln. 1 – 35).

As to claim 8, Brendel teaches a method according to claim 6, wherein providing the values for the one or more parameters comprises measuring at least one of the parameters ("...(measure the round trip time, or "latency") to the intended servers and choose the fastest responding server..." Col. 11 Ln. 14 – 18).

As to claim 9, Joffe teaches a method according to claim 8, wherein measuring at least one of the parameters, for at least one of the paths, is performed before receiving the connection establishment request ("...Collector Components..." Col. 11 Ln. 57 – 67,

Col. 12 LN. 1 – 7, Col. 13 Ln. 1 – 27: NOTE: The collector components periodically collect and store the parameters, then later provide it to the Director (load balancer) when a client makes a request/connection).

As to claim 11, Brendel teaches a method according to claim 1, further comprising changing the destination IP address of packets received by the load balancer from the client, to an IP address of the selected server Address Translation Table 32/34 Col. 6 Ln. 40 – 48, Col. 11 Ln. 56 – 67).

As to claim 15, Brendel teaches a method according to claim 1, wherein one of the plurality of servers are located in different geographical regions (figure 3 Assigned Server 52 Col. 6 Ln. 17 – 18).

As to claim 17, Brendel teaches a method according to claim 1, wherein the virtual server hosts a web site ("...web farm..." Col. 15 Ln. 41 – 53).

As to claim 24, Brendel teaches a method of selecting a server to be accessed, comprising:

receiving, by a load balancer, a message relating to a virtual server, hosted by a plurality of servers, and to a client desiring to receive data from the virtual server ("...the browser sends out the URL with the requested resource..." Col. 5 Ln. 1 – 20); and

selecting, by the load balancer, one of the plurality of servers to provide data to the client based on one or more parameters ("...make a server assignment..." Col. 5 Ln. 1 – 20, "...(measure the round trip time or "latency") to the intended servers and choose the fastest responding server..." Col. 11 Ln. 14 – 18), wherein the load balancer being closer to the client than to the selected server ("...load balancer can be moved below the client's network stack..." Col. 4 Ln. 63 – 67, "...client-side dispatcher in the client machine..." Col. 5 Ln. 55 – 56, Col. 6 Ln. 34 – 36), and wherein the load balancer comprises a client-controlled load balancer that directly selects said one of the plurality of servers representing the virtual server ("...load-balancer module in the client machine...make a server assignment..." Col. 5 Ln. 1 – 20, Ln. 55 – 56).

Brendel does not explicitly teach selecting, by the load balancer, one of the plurality of servers to provide data to the client based on one or more parameters related to a path to the client.

Joffe teaches selecting, by the load balancer, one of the plurality of servers to provide data to the client based on one or more parameters related to a path to the client ("...round trip values for paths..." Col. 13 Ln. 1 – 31, "...a sequence of values representative of the round trip time to-and-from every client site..." Col. 15 Ln. 9 – 60, Col. 16 Ln. 1 – 21).

It would have been obvious to one of ordinary skill in the art the time the invention was made to modify the system of Brendel with the teaching of Joffe because the teaching of Joffe would improve the system of Brendel by providing a technique for dynamically selecting appropriate server from which to retrieve data object for a user

based upon the user's request, shortest network path, the capabilities and topology of the underlying network thus, efficiently using resources and optimally responding to user's request by reducing wait time (Joffe Col. 3 Ln. 37 – 54).

As to claim 25, Brendel teaches a method according to claim 24, wherein the load balancer is closer to the client than to any of the plurality of servers hosting the virtual server ("...load balancer can be moved below the client's network stack..." Col. 4 Ln. 63 – 67, "...client-side dispatcher in the client machine..." Col. 5 Ln. 55 – 56, Col. 6 Ln. 34 – 36).

As to claims 26 and 27, see the rejection of claims 2 and 3 respectively.

As to claim 28, Brendel teaches a method according to claim 24, wherein the load balancer is not associated with the virtual server ("...load balancer can be moved below the client's network stack..." Col. 4 Ln. 63 – 67, "...client-side dispatcher in the client machine..." Col. 5 Ln. 55 – 56, Col. 6 Ln. 34 – 36).

As to claim 29, Brendel teaches a method according to claim 24, wherein the load balancer is under control of a system manager of the client ("...operating systems..." Col. 6 Ln. 4 – 16).

As to claim 32, Brendel teaches a method according to claim 24, wherein receiving the message comprises receiving a connection establishment request directed to the virtual server ("…Client-Side Load Balancer intercepts Connection packets…" Col. 4 Ln. 63 – 67, Col. 5 Ln. 1 – 20).

As to claim 33, Brendel teaches a method according to claim 24, wherein receiving the message comprises receiving a message directed to the load balancer ("…the browser sends out the URL with the requested resource…The client-load balancer can then extract the URL and make a server assignment…" Col. 5 Ln. 1 – 20).

As to claim 34, Joffe teaches a method according to claim 24, wherein selecting one of the servers comprises selecting a server which has a lowest cost path to the load balancer ("...shortest available network path..." Col. 3 Ln. 44 – 54).

As to claim 35, Brendel teaches a method according to claim 24, wherein selecting one of the servers comprises selecting a server which has a lowest delay path or a highest packet size path to the load balancer ("…(measure the round trip time, or "latency") to the intended servers and choose the fastest responding server…" Col. 11 Ln. 14 – 18).

As to claim 36, Brendel teaches a method according to claim 24, wherein the load balancer is geographically closer to the client than to the selected server ("…load

balancer can be moved below the client's network stack..." Col. 4 Ln. 63 – 67, "...client-side dispatcher in the client machine..." Col. 5 Ln. 55 – 56, Col. 6 Ln. 34 – 36).

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,182,139 B1 to Brendel in view of U.S. Pat. No. 6,185,619 B1 issued to Joffe et al. as applied to claim 1 above, and further in view of U.S. Pat. No. 6,658,479 B1 issued to Zaumen et al.

As to claim 5, Joffe and Brendel are silent with reference to a method according to claim 1, wherein the one or more parameters comprise a cost of communication.

Zaumen teaches a method according to claim 1, wherein the one or more parameters comprise a cost of communication (figure 4 Step 408 Col. 9 Ln. 8 – 38).

It would have been obvious to one of ordinary skill in the art the time the invention was made to modify the system of Joffe and Brendel with the teaching of Zaumen because the teaching of Zaumen would improve the system of Joffe and Brendel by providing a technique for simultaneously minimizing congestion and balancing load on a plurality of servers (Zaumen Col. 1 Ln. 58 – 64, Col. 2 Ln. 30 – 34).

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,182,139 B1 to Brendel in view of U.S. Pat. No. 6,185,619 B1 issued to Joffe et al. as applied to claim 8 above, and further in view of U.S. Pat. No. 7,174,390 B2 issued to Schulter et al.

As to claim 10, Joffe teaches a method according to claim 8, wherein measuring at least one of the parameters for at least one of the paths ("...round trip values for paths..." Col. 13 Ln. 1 – 31, "...a sequence of values representative of the round trip time to-and-from every client site..." Col. 15 Ln. 9 – 60, Col. 16 Ln. 1 – 21).

Schulter teaches the measuring performed after receiving the connection establishment request ("...Any load balancing decisions that are made will only be made when a new connection is established between the client and a service..." Col. 17 Ln. 39 – 67).

It would have been obvious to one of ordinary skill in the art the time the invention was made to modify the system of Joffe and Brendel with the teaching of Schulter because the teaching of Schulter would improve the system of Joffe and Brendel by allowing for optimal use of system resources (e.g. connections) by only establishing connection when it is determined that the requested service is available.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,182,139 B1 to Brendel in view of U.S. Pat. No. 6,185,619 B1 issued to Joffe et al. as applied to claim 1 above, and further in view of U.S. Pat. No. 6,389,462 B1 issued to Cohen et al.

As to claim 12, Joffe and Brendel are silent with reference to a method according to claim 1, further comprising changing the source IP address of packets received by the load balancer from the selected server.

Cohen teaches a method according to claim 1, further comprising changing the source IP address of packets received by the load balancer from the selected server ("...translates..." Col. 8 Ln. 35 – 52).

It would have been obvious to one of ordinary skill in the art the time the invention was made to modify the system of Joffe and Brendel with the teaching of Cohen because the teaching of Cohen would improve the system of Joffe and Brendel by providing a technique for re-writing destination address/source address or both, making it appear to the server that all connections originate from the load balancer, thus hiding the distributed nature of the system from the servers.

Claims 13, 14, 30 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,182,139 B1 to Brendel in view of U.S. Pat. No. 6,185,619 B1 issued to Joffe et al. as applied to claims 1 and 24 above, and further in view of U.S. Pat. No. 6,304,913 B1 issued to Rune.

As to claim 13, Joffe and Brendel are silent with reference to a method according to claim 1, further comprising transmitting an IP address of the selected server to the client.

Rune teaches a method according to claim 1, further comprising transmitting an IP address of the selected server to the client (Steps 708/808 Col. 7 Ln. 7 – 45).

It would have been obvious to one of ordinary skill in the art the time the invention was made to modify the system of Joffe and Brendel with the teaching of Rune because the teaching of Rune would improve the system of Joffe and Brendel by providing a hierarchical naming system for computers, services, or any resource participating in the Internet for translating domain names meaningful to humans into the numerical (binary) identifiers associated with networking equipment for the purpose of locating and addressing devices world-wide.

As to claim 14, Rune teaches a method according to claim 13, wherein transmitting the IP address of the selected server to the client comprises transmitting a DNS response (Steps 708/808 Col. 7 Ln. 7 – 45).

As to claim 30, Joffe and Brendel are silent with reference to a method according to claim 24, wherein receiving the message comprises receiving a DNS query message.

Rune teaches a method according to claim 24, wherein receiving the message comprises receiving a DNS query message (Step 702/802 Col. 7 – 45).

It would have been obvious to one of ordinary skill in the art the time the invention was made to modify the system of Joffe and Brendel with the teaching of Rune because the teaching of Rune would improve the system of Joffe and Brendel by providing a hierarchical naming system for computers, services, or any resource

participating in the Internet for translating domain names meaningful to humans into the numerical (binary) identifiers associated with networking equipment for the purpose of locating and addressing devices world-wide.

As to claim 31, Joffe and Brendel are silent with reference to a method according to claim 1, wherein receiving the message comprises receiving from a DNS server.

Rune teaches a method according to claim 24, wherein receiving the message comprises receiving from a DNS server (Steps 708/808 Col. 7 Ln. 7 – 45).

It would have been obvious to one of ordinary skill in the art the time the invention was made to modify the system of Joffe and Brendel with the teaching of Rune because the teaching of Rune would improve the system of Joffe and Brendel by providing a hierarchical naming system for computers, services, or any resource participating in the Internet for translating domain names meaningful to humans into the numerical (binary) identifiers associated with networking equipment for the purpose of locating and addressing devices world-wide.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,182,139 B1 to Brendel in view of U.S. Pat. No. 6,185,619 B1 issued to Joffe et al. as applied to claim 1 above, and further in view of U.S. Pat. No. 6,249,801 B1 issued to Zisapel et al.

As to claim 16, Joffe and Brendel are silent with reference to a method according to claim 1, wherein selecting a server to provide data for the client comprises selecting, by the load balancer, a second load balancer which is to perform the server selection and selecting, by the second load balancer, a server to provide data for the client.

Zisapel teaches a method according to claim 1, wherein selecting a server to provide data for the client comprises selecting, by the load balancer, a second load balancer which is to perform the server selection and selecting, by the second load balancer, a server to provide data for the client ("...first load balancer...second load balancer..." Col. 2 Ln. 20 – 39, Col. 6 Ln. 40 – 49).

It would have been obvious to one of ordinary skill in the art the time the invention was made to modify the system of Joffe and Brendel with the teaching of Zisapel because the teaching of Zisapel would improve the system of Joffe and Brendel by optimal selecting servers to service client request using the load balancer closest the requesting client.

Claims 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,182,139 B1 to Brendel in view of U.S. Pat. No. 6,185,619 B1 issued to Joffe et al. as applied to claim 1 above, and further in view of U.S. Pat. No. 6,950,848 B1 issued to Yousefi'zadeh.

As to claim 18, Joffe and Brendel are silent with reference to a method according to claim 1, wherein selecting a server to provide data for the client comprises selecting a server which minimizes a function of the one or more parameters.

Yousefi'zadeh teaches a method according to claim 1, wherein selecting a server to provide data for the client comprises selecting a server which minimizes a function of the one or more parameters ("...(3) Least Number of Connections (LNC)..." Col. 5 Ln. 20 - 39, "...Weighting factors...adjusted to have...mininimum..." Col. 8 Ln. 44 – 48).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Joffe and Brendel with the teaching of Yousefi'zadeh because the teaching of Yousefi'zadeh would improve the system of Joffe and Brendel by providing a load balancing module that monitors the state of multiple servers and selectively routes transactions to the servers to optimize performance and availability (Yousefi'zadeh Col. 5 Ln. 6 – 9).

As to claim 19, Yousefi'zadeh teaches a method according to claim 18, wherein selecting a server to provide data comprises choosing a function of the one or more parameters to be minimized and selecting a server which minimizes the chosen function ("...(3) Least Number of Connections (LNC)..." Col. 5 Ln. 20 - 39, "...Weighting factors...adjusted to have...mininimum..." Col. 8 Ln. 44 – 48).

As to claim 20, Yousefi'zadeh teaches method according to claim 19, wherein the function is chosen responsive to a protocol with which the virtual server is accessed

("…load balancing schemes…" Col. 5 Ln. 20 – 39, Col. 12 Ln. 63 – 67, Col. 13 Ln. 4 – 67).

As to claim 21, Yousefi'zadeh teaches method according to claim 19, wherein the function is chosen responsive to the virtual server accessed ("…load balancing scheme…(1) Round Robin; (2) Ratio;...(3) Least Number of Connections (LNC)...(4) Fastest Response Time (FRT)...(5) Observed..." Col. 5 Ln. 20 – 39, Col. 12 Ln. 63 – 67, Col. 13 Ln. 1 – 67).

Claims 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,182,139 B1 to Brendel in view of U.S. Pat. No. 6,185,619 B1 issued to Joffe et al. and further in view of U.S. Pat. No. 6,950,848 B1 issued to Yousefi'zadeh as applied to claim 19 above, and further in view of U.S. Pat. No. 6,154,777 issued to Ebrahim.

As to claim 22, Yousefi'zadeh, Joffe and Brendel are silent with reference to a method according to claim 19, wherein the function is chosen responsive to an attribute of the client.

Ebrahim teaches a method according to claim 19, wherein the function is chosen responsive to an attribute of the client ("…information about the sender…specific requester's identity…" Abstract, "…domain name of the sender…" Col. 5 Ln. 18 – 38).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Yousefi'zadeh, Joffe and Brendel with the Ebrahim teaching of because the teaching of Ebrahim would improve the system of Yousefi'zadeh, Joffe and Brendel by providing a technique for tracking the client(s) initiating the request in order to select the most efficient server to service the request.

As to claim 23, Yousefi'zadeh, Joffe and Brendel are silent with reference to a method according to claim 19, wherein the function is chosen responsive to the time of the selection.

Ebrahim teaches a method according to claim 19, wherein the function is chosen responsive to the time of the selection ("…time of day…" Abstract, "…requester's time of day or time zone…Col. 5 Ln. 18 – 38).teaches a method according to claim 19, wherein the function is chosen responsive to an attribute of the client ("…information about the sender…specific requester's identity…" Abstract, "…domain name of the sender…" Col. 5 Ln. 18 – 38).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Yousefi'zadeh, Joffe and Brendel with the Ebrahim teaching of because the teaching of Ebrahim would improve the system of Yousefi'zadeh, Joffe and Brendel by providing a technique for tracking the client(s) initiating the request in order to select the most efficient server to service the request.

Claims 37-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,182,139 B1 to Brendel in view of U.S. Pat. No. 6,658,479 B1 issued to Zaumen et al.

As to claim 37, Brendel teaches a method of selecting a server to be accessed, comprising:

receiving, by a load balancer, a message relating to a virtual server, hosted by a plurality of servers, and to a client desiring to receive data from the virtual server ("...the browser sends out the URL with the requested resource..." Col. 5 Ln. 1 – 20); and

selecting, by the load balancer, one of the plurality of servers to provide data to the client ("...make a server assignment..." Col. 5 Ln. 1 – 20, "...(measure the round trip time or "latency") to the intended servers and choose the fastest responding server..." Col. 11 Ln. 14 – 18), wherein the load balancer as comprising a client-controlled load balancer that directly selects said one of the plurality of servers representing the virtual server based on one or more parameters ("...make a server assignment..." Col. 5 Ln. 1 – 20, "...(measure the round trip time or "latency") to the intended servers and choose the fastest responding server..." Col. 11 Ln. 14 – 18).

Brendel is silent with reference to selecting, by the load balancer, one of the plurality of servers to provide data to the client, at least partially responsive to the cost of communications between the client and one or more of the plurality of servers.

Zaumen teaches selecting, by the load balancer, one of the plurality of servers to provide data to the client, at least partially responsive to the cost of communications

between the client and one or more of the plurality of servers (figure 4 Step 408 Col. 9 Ln. 8 – 38).

It would have been obvious to one of ordinary skill in the art the time the invention was made to modify the system of Brendel with the teaching of Zaumen because the teaching of Zaumen would improve the system of Brendel by providing a technique for simultaneously minimizing congestion and balancing load on a plurality of servers (Zaumen Col. 1 Ln. 58 – 64, Col. 2 Ln. 30 – 34).

As to claim 38, Zaumen teaches a method according to claim 37, wherein selecting one of the servers comprises selecting a server under a constraint that a lowest cost client communication connection is used in connecting to the server ("...lowest link cost..." Col. 9 Ln. 23 – 30).

As to claim 39, Zaumen teaches a method according to claim 37, wherein selecting one of the servers comprises selecting a server which minimizes a weighted sum of communication costs to the server and at least one other route related parameter ("...lowest link cost..." Col. 9 Ln. 23 – 30, Col. 12 Ln. 1 – 25).

As to claim 40, Zaumen teaches a method according to claim 39, wherein selecting one of the sewers comprises selecting a server which minimizes a weighted sum of the communication costs to the server and the round trip delay to the server ("...minimum delay anycasting algorithm..." Col. 6 Ln. 10 – 26, Col. 12 Ln. 1 – 25).

Claims 41-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,182,139 B1 to Brendel in view of U.S. Pat. No. 6,154,777 issued to Ebrahim.

As to claim 41, Brendel teaches a load balancer, comprising:

an interface adapted to receive server access messages from clients TCP Layer 16 Col. 5 Ln. 55 – 67); and

a processor adapted to determine, for at least one of the messages, whether the message requires load balancing, and to select for at least one message determined to require load balancing, a server to service the client ("...make a server assignment..." Col. 5 Ln. 1 – 20, "...(measure the round trip time or "latency") to the intended servers and choose the fastest responding server..." Col. 11 Ln. 14 – 18: NOTE: the client-side load balancer in the Client 10 is by a processor), wherein the processor comprising a client-controlled processor that directly selects the server to service the client ("...load-balancer module in the client machine...make a server assignment..." Col. 5 Ln. 1 – 20, Ln. 55 – 56).

Brendel is silent with reference to determine, for at least one of the messages, whether the message requires load balancing responsive to at least one attribute different from the identity of the server referenced by the message and selects the server to service the client based on the at least one attribute.

Ebrahim teaching determining, for at least one of the messages, whether the message requires load balancing responsive to at least one attribute different from the identity of the server referenced by the message and selects the server to service the client based on the at least one attribute ("…information about the sender…specific requester's identity…time of day…" Abstract, "…domain name of the sender…requester's time of day or time zone…" Col. 5 Ln. 18 – 38).

It would have been obvious to one of ordinary skill in the art the time the invention was made to modify the system of Brendel with the teaching of Ebrahim because the teaching of Ebrahim would improve the system of Brendel by providing a technique for spreading work between two or more computers, network links, etc. at optimal time, in order to get optimal resource utilization, maximize throughput, and minimize response time.

As to claim 42, Ebrahim teaches a load balancer according to claim 41, wherein the at least one attribute comprises the time at which the message is received at the interface ("…time of day…" Abstract, "…requester's time of day or time zone…Col. 5 Ln. 18 – 38).

As to claim 43, Ebrahim teaches a load balancer according to claim 41, wherein the at least one attribute comprises the identity of the client ("…information about the sender…specific requester's identity…" Abstract, "…domain name of the sender…" Col. 5 Ln. 18 – 38).

As to claim 44, Ebrahim teaches a load balancer according to claim 41, wherein the at least one attribute comprises a protocol to govern the communication with the server ("...information about the sender...specific requester's identity...time of day..." Abstract, "...domain name of the sender...requester's time of day or time zone..." Col. 5 Ln. 18 – 38).

As to claim 45, Brendel teaches a load balancer according to claim 41, further comprising a packet changing unit adapted to change the contents of at least one field of packets belonging to connections for which load balancing was performed ("...changes the virtual IP address of the server farm..." Col. 6 Ln. 25 – 27, Col. 11 Ln. 56 – 67).

Claim 46 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,182,139 B1 to Brendel in view of U.S. Pat. No. 6,154,777 issued to Ebrahim as applied to claim 45 above, and further in view of U.S. Pat. No. 6,389,462 B1 issued to Cohen et al.

As to claim 46, Ebrahim and Brendel are silent with reference to load balancer according to claim 45, wherein the packet changing unit is adapted to change packets in accordance with half NAT or full NAT procedures.

Cohen teaches load balancer according to claim 45, wherein the packet changing unit is adapted to change packets in accordance with half NAT or full NAT procedures ("...NAT..." Col. 8 Ln. 53 – 58, Col. 14 Ln. 21 – 45, Col. 15 Ln. 9 – 37).

It would have been obvious to one of ordinary skill in the art the time the invention was made to modify the system of Ebrahim and Brendel with the teaching of Cohen because the teaching of Cohen would improve the system of Ebrahim and Brendel by providing a technique for re-writing destination address/source address or both, making it appear to the server that all connections are origination from the load balancer, thus hiding the distributed nature of the system from the servers.

Claims 47, 50 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,182,139 B1 to Brendel in view of U.S. Pat. No. 6,950,848 B1 issued to Yousefi'zadeh.

As to claim 47, Brendel teaches a method of selecting a server to be accessed, comprising:

receiving, by a load balancer, a message relating to a virtual server, hosted by a plurality of servers, and to a client desiring to receive data from the virtual server ("...the browser sends out the URL with the requested resource..." Col. 5 Ln. 1 – 20); and

selecting, by the load balancer, one of the plurality of servers to provide data to the client ("...make a server assignment..." Col. 5 Ln. 1 – 20, "...(measure the round trip time or "latency") to the intended servers and choose the fastest responding server..."

Col. 11 Ln. 14 – 18) and wherein the load balancer comprising a client-controlled load balancer that directly selects said one of the plurality of servers representing the virtual server ("…load balancer can be moved below the client's network stack…" Col. 4 Ln. 63 – 67, "…client-side dispatcher in the client machine…" Col. 5 Ln. 55 – 56, Col. 6 Ln. 34 – 36).

Brendel is silent with reference to choosing a function from a plurality of predetermined functions, selecting, by the load balancer, one of the plurality of servers that minimizes or maximizes the chosen function, to provide data to the client and wherein the load balancer selects one of the plurality of servers that minimizes or maximizes the chosen function.

Yousefi'zadeh teaches choosing a function from a plurality of predetermined functions ("…load balancing scheme…(1) Round Robin; (2) Ratio;...(3) Least Number of Connections (LNC)...(4) Fastest Response Time (FRT)...(5) Observed..." Col. 5 Ln. 20 – 39, Col. 12 Ln. 63 – 67, Col. 13 Ln. 1 – 67), selecting, by the load balancer, one of the plurality of servers that minimizes or maximizes the chosen function, to provide data to the client and wherein the load balancer selects one of the plurality of servers that minimizes or maximizes the chosen function ("...(3) Least Number of Connections (LNC)...(4) Fastest Response Time (FRT)..." Col. 5 Ln. 20 – 39).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Brendel with the teaching of Yousefi'zadeh because the teaching of Yousefi'zadeh would improve the system of Brendel by providing a load balancing module that monitors the state of multiple servers and

selectively routes transactions to the servers to optimize performance and availability (Yousefi'zadeh Col. 5 Ln. 6 – 9).

As to claim 50, Yousefi'zadeh teaches a method according to claim 47, wherein at least two of the predetermined functions depend on different groups of one or more parameters ("...load balancing scheme...(1) Round Robin; (2) Ratio;...(3) Least Number of Connections (LNC)...(4) Fastest Response Time (FRT)...(5) Observed..." Col. 5 Ln. 20 – 39, Col. 12 Ln. 63 – 67, Col. 13 Ln. 1 – 67).

As to claim 51, Yousefi'zadeh teaches a method according to claim 47, wherein at least two of the predetermined functions depend on the same parameters but give different weight to one or more of the parameters on which they depend ("...(5) Observed..." Col. 5 Ln. 20 – 39, Col. 14 Ln. 58 – 67, Col. 15 Ln. 1 – 3).

Claims 48 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,182,139 B1 to Brendel in view of U.S. Pat. No. 6,950,848 B1 issued to Yousefi'zadeh as applied to claim 47 above, and further in view of U.S. Pat. No. 6,154,777 issued to Ebrahim.

As to claim 48, Brendel and Yousefi'zadeh are silent with reference to a method according to claim 47, wherein choosing the function comprises choosing responsive to an identity of the client.

Ebrahim teaches a method according to claim 47, wherein choosing the function comprises choosing responsive to an identity of the client ("…information about the sender…specific requester's identity…" Abstract, "…domain name of the sender…" Col. 5 Ln. 18 – 38).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Yousefi'zadeh and Brendel with the Ebrahim teaching of because the teaching of Ebrahim would improve the system of Yousefi'zadeh and Brendel by providing a technique for tracking the client(s) initiating the request in order to select the most efficient server to service the request.

As to claim 49, Brendel and Yousefi'zadeh are silent with reference to a method according to claim 47, wherein choosing the function comprises choosing responsive to a time at which the message is received.

Ebrahim teaches method according to claim 47, wherein choosing the function comprises choosing responsive to a time at which the message is received ("…time of day…" Abstract, "…requester's time of day or time zone…Col. 5 Ln. 18 – 38).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Yousefi'zadeh and Brendel with the Ebrahim teaching of because the teaching of Ebrahim would improve the system of Yousefi'zadeh and Brendel by providing a technique for tracking the client(s) initiating the request in order to select the most efficient server to service the request.

Claim 52 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,078,960 to Ballard in view of U.S. Pat. No. 6,185,619 B1 issued to Joffe et al.

As to claim 52, Ballard teaches a method of selecting a server to be accessed by a client via a wide area network (WAN) from among a plurality of servers associated with a domain name comprising (figures 1/2 Col. 3 Ln. 31 – 67, Col. 4 Ln. 1 – 51):

providing a client-controlled load balancer in a local area network (LAN) connected to the WAN ("...load balancing..." Col. 3 Ln. 31 – 37), the LAN including the client;

receiving at the load balancer a list of addresses of servers hosting the domain name ("...reads the load balance list 54..." Col. 6 Ln. 31 – 48); and

selecting by the client-controlled load balancer one of the addresses of the plurality of servers (figure 6 Step 52 Col. 6 Ln. 31 – 48).

Ballard is silent with reference to selecting by the load balancer one of the addresses of the plurality of servers based on a parameter related to a path between a point in the vicinity of the client and one of the plurality of servers.

Joffe teaches selecting by the load balancer one of the addresses of the plurality of servers based on a parameter related to a path between a point in the vicinity of the client and one of the plurality of servers ("...round trip values for paths..." Col. 13 Ln. 1 – 31, "...a sequence of values representative of the round trip time to-and-from every client site..." Col. 15 Ln. 9 – 60, Col. 16 Ln. 1 – 21).

It would have been obvious to one of ordinary skill in the art the time the invention was made to modify the system of Ballard with the teaching of Joffe because the teaching of Joffe would improve the system of Ballard by providing a technique for dynamically selecting appropriate server from which to retrieve data object for a user based upon the user's request, shortest network path, the capabilities and topology of the underlying network thus, efficiently using resources and optimally responding to user's request by reducing wait time (Joffe Col. 3 Ln. 37 – 54).

Claim 53 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,078,960 to Ballard in view of U.S. Pat. No. 6,185,619 B1 issued to Joffe et al. as applied to claim 52 above, and further in view of U.S. Pat. No. 6,154,777 issued to Ebrahim.

As to claim 53, Ballard and Joffe are silent with reference to the method of claim 52 wherein the parameter is time-variable.

Ebrahim teaches the method of claim 52 wherein the parameter is time-variable ("…time of day…" Abstract, "…time of day or time zone…" Col. 5 Ln. 18 – 38).

It would have been obvious to one of ordinary skill in the art the time the invention was made to modify the system of Joffe and Ballard with the teaching of Ebrahim because the teaching of Ebrahim would improve the system of Joffe and Ballard by providing a technique for spreading work between two or more computers,

network links, etc. at optimal time, in order to get optimal resource utilization, maximize throughput, and minimize response time.

Claim 54 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,078,960 to Ballard in view of U.S. Pat. No. 6,185,619 B1 issued to Joffe et al. as applied to claim 52 above, and further in view of U.S. Pat. No. 7,043,563 B2 issued to Vange et al.

As to claim 54, Ballard and Joffe are silent with reference to the method of claim 52, wherein the parameter comprises a measure of communication quality.

Vange teaches the method of claim 52, wherein the parameter comprises a measure of communication quality ("...The best available front-end server 201 is determined based on estimates and actual measurements of quality of service..." Col. 11 Ln. 22 – 45, Col. 20 Ln. 22 – 29).

It would have been obvious to one of ordinary skill in the art the time the invention was made to modify the system of Joffe and Ballard with the teaching of Vange because the teaching of Vange would improve the system of Joffe and Ballard by providing a technique for enabling redirection of client request to any of an arbitrary set of server computers that guarantees a certain level of performance to a data flows.

(10) Response to Argument

Appellant argues in substance that (1) the rejection to claim 1 does not provide prima facie case of obviousness because the rejection does not satisfy MPEP 706.02(j) requirement, (2) the Brendel prior art discloses that the client-side load balancer could not perform traditional load balancing without knowledge of the loads of each server at the server farm and as such could not be modified or combined with conventional or traditional load balancing of the Joffe prior art, (3) the Joffe prior art teaches away from modifying client-side devices, (4) the rejection to claim 37 does not provide prima facie case of obviousness because the rejection does not satisfy MPEP 706.02(j) requirement, (5) there is no proper reasoning for modifying the Brendel and Joffe prior arts with the Zaumen prior art, (6) the Zaumen prior art teaches away from the claimed invention because it's process of optimally determining the routing path between network nodes is not related to the method of selecting a server using a client-controlled load balancer of claim 37, (7) the rejection to claim 41 does not provide prima facie case of obviousness because the rejection does not satisfy MPEP 706.02(j) requirement, (8) the Ebrahim prior art does not teach any change to the Brendel prior art that would result in the claimed invention of claim 41, (9) the rejection to claim 47 does not provide prima facie case of obviousness because the rejection does not satisfy MPEP 706.02(j) requirement, (10) the Yousefi'zadeh prior art does not teach any modification to the Brendel prior art that would allow the combination of Brendel and Yousefi'zadeh prior arts to provide the functionality of choosing a function and selecting a server that maximizes the chosen function, (11) the rejection to claim 52 does not provide prima facie case of obviousness because the rejection does not satisfy MPEP 706.02(j)

requirement and (12) the Ballard prior art does not teach selecting an address of a server based on a parameter related to a path between a point in the vicinity of the client and one of the servers as claimed in claim 52.

The Examiner respectfully traverses Appellant's arguments:

As to point (1), the rejection satisfies the MPEP 706.02(j) requirement because (a) the relevant teachings of the Brendel prior art with reference to the relevant column and line numbers are used in the rejection, (b) the difference in the claim over the applied reference are set forth in the rejection, (c) the proposed modification of the applied reference necessary to arrive at the claimed subject matter is set forth in the rejection by referencing the Joffe prior art, and (c) an explanation as to why the claimed invention would have been obvious to one of ordinary skill in the art at the time the invention was made is set forth in the rejection because the Joffe prior art efficiently uses resources and minimizes (optimal) the wait time to respond to user's request by dynamically/automatically selecting appropriate server based upon the user's request and shortest network path.

As to point (2), the Examiner agrees that the client-side load balancer can not perform traditional load balancing without knowledge of the loads of each server at the server farm (Col. 5 Ln. 31 – 35). This passage implies that if the client-side load balancer has knowledge of the loads of each server at the server farm it could perform traditional load balancing. The client in some cases does in fact have knowledge of the loads of the server farm. The client has knowledge of the "round trip time" or "latency" of the server farm/intended servers (Col. 11 Ln. 13 – 16) and uses this information to

choose a server. The Brendel prior art could therefore perform traditional load balancing.

Secondly, it seems Appellant is arguing that the Brendel and Joffe prior arts are not analogous, it has been held that a prior art reference must either be in the field of appellant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the appellant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, the Brendel prior art discloses a technique (load balancing) for assigning/distributing workload/requests across network server farm (Col. 5 Ln. 1 – 20) and the Joffe prior art also discloses a process (load balancing) for assigning/distributing workload/requests made by clients among multiple network servers (Abstract), thus making the prior arts analogous.

As to point (3), Appellant 's arguments against the references seem to attack the references individually. One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

The Joffe prior art discloses a method and system provides the ability to assign requests for data objects made by clients among multiple network servers. It provides a distributed computing system and methods to assign user requests to replicated servers contained by the distributed computing system in a manner that attempts to meet the goals of a particular routing policy including the shortest available network path. The

routing policies may include minimizing the amount of time for the request to be completed (Col. 3 Ln. 44 – 54). The Joffe prior art includes a load balancer (Director/Ping Manager) that makes the decision of the best route for sending request or selecting a server (Col. 3 Ln. 55 – 63, Col. 11 Ln. 53 – 67, Col. 12 Ln. 1 – 7). The decision for the best route is made based on multiple values ("...round trip values...") for multiple paths between the client and servers (Col. 13 Ln. 29 – 31, Col. 15 Ln. 10 – 13). The Joffe prior art is used in this rejection to show that the idea of providing by a load balancer, multiples values of multiple paths between a client and a server for selecting a server is not novel.

As to point (4), the rejection satisfies the MPEP 706.02(j) requirement because (a) the relevant teachings of the Brendel prior art with reference to the relevant column and line numbers are used in the rejection, (b) the difference in the claim over the applied reference are set forth in the rejection, (c) the proposed modification of the applied reference necessary to arrive at the claimed subject matter is set forth in the rejection by referencing the Zaumen prior art, and (d) an explanation as to why the claimed invention would have been obvious to one of ordinary skill in the art at the time the invention was made is set forth in the rejection because the Zaumen prior art provides a technique for simultaneously minimizing congestion and balancing load on a plurality of servers.

As to point (5), the examiner recognizes that obviousness may be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the

references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988), *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992), and *KSR International Co. v. Teleflex, Inc.*, 550 U.S. 398, 82 USPQ2d 1385 (2007). In this case, the motivation for the rejection of claim 5 could be found in column 1 lines 58-64 and column 2 lines 30-34 of the Zaumen prior art.

As to point (6), Appellant's arguments against the references seem to attack the references individually. One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

The Zaumen prior art discloses a method for load-balancing requests/services to nodes in a way that simultaneously minimizes congestion in the network and balances the load in the servers. When a request/service is requested, a link cost is determined for each link connecting two nodes for every possible route to the destination node. A link cost at a current node is the cost of routing a data flow from a current node to a successor node. A destination node or server is selected based on the communication/link cost (figure 4 Step 408 Col. 9 Ln. 8 – 44) and is functionally equivalent to the claimed limitation, "selecting, by the load balancer, one of the plurality of servers to provide data to the client, at least partially responsive to the cost of communications between the client and one or more of the plurality of servers".

As to point (7), the rejection satisfies the MPEP 706.02(j) requirement because (a) the relevant teachings of the Brendel prior art with reference to the relevant column and line numbers are used in the rejection, (b) the difference in the claim over the applied reference are set forth in the rejection, (c) the proposed modification of the applied reference necessary to arrive at the claimed subject matter is set forth in the rejection by referencing the Ebrahim prior art, and (d) an explanation as to why the claimed invention would have been obvious to one of ordinary skill in the art at the time the invention was made is set forth in the rejection because the Ebrahim prior art provides a technique for spreading work between two or more computers, network links, etc. at optimal time, in order to get optimal resource utilization, maximize throughput, and minimize response time.

As to point (8), the Ebrahim prior art discloses a method for load balancing or selecting a server. The selection of a server is based on a request/message from the sender or requester and the request/message includes sender's identity, type of service requested, **time of day, date, and random selection of recipient** etc as attributes (Abstract, figure 3 Col. 5 Ln. 1 – 38). These attribute(s) of the request is functionally equivalent to the claimed message (attribute) for determining when load balancing is required and for selecting a server.

As to point (9), the rejection satisfies the MPEP 706.02(j) requirement because (a) the relevant teachings of the Brendel prior art with reference to the relevant column and line numbers are used in the rejection, (b) the difference in the claim over the applied reference are set forth in the rejection, (c) the proposed modification of the

applied reference necessary to arrive at the claimed subject matter is set forth in the rejection by referencing the Yousefi'zadeh prior art, and (d) an explanation as to why the claimed invention would have been obvious to one of ordinary skill in the art at the time the invention was made is set forth in the rejection because the Yousefi'zadeh prior art provides a load balancing module that monitors the state of multiple servers and selectively routes transactions to the servers to optimize performance and availability (Yousefi'zadeh Col. 5 Ln. 6 – 9).

As to point (10), the Yousefi'zadeh prior art discloses a load balancing method and system for a transaction computer system having multiple database servers. The method includes the step of using a load balancer for assigning transactions (requests) to respective ones of the multiple database servers to balance respective loads of the multiple database servers. Assigning each new transaction includes the steps of determining possible assignments of that new transaction to one or more of the multiple database servers, each possible assignment to one of the multiple database servers being based on a load balancing scheme to balance respective loads of the multiple database servers. The load balancer (Functional Layer Module 30) dynamically distributes client transactions (requests) across the multiple database servers (Col. 4 Ln. 50 – 67). The load balancing scheme includes a list of functions or weighting factors (e.g. Round Robin, Ratio, Least Number of Connections (LNC), Fastest Response Time (FRT) and combination of LNC and FRT) (Col. 5 Ln. 20 – 39). The load balancer chooses or utilizes one or a combination of the functions or weighting factors to selects a database server to provide data to a client (i.e. the claimed choosing step of claim 47).

And at least the Least Number of Connections (LNC) and Fastest Response Time (FRT) functions is "minimized" and "maximized" respectively because a database server with the least number of connections (minimization) is selected and a database server with the fastest measured response time (maximization) is selected (Col. 5 Ln. 20 – 39).

As to point (11), the rejection satisfies the MPEP 706.02(j) requirement because (a) the relevant teachings of the Ballard prior art with reference to the relevant column and line numbers are used in the rejection, (b) the difference in the claim over the applied reference are set forth in the rejection, (c) the proposed modification of the applied reference necessary to arrive at the claimed subject matter is set forth in the rejection by referencing the Joffe prior art, and (d) an explanation as to why the claimed invention would have been obvious to one of ordinary skill in the art at the time the invention was made is set forth in the rejection because the Joffe prior art efficiently uses resources and minimizes (optimal) the wait time to respond to user's request by dynamically selecting appropriate server based upon the user's request and shortest network path.

As to point (12), this argument is moot because the Ballard prior art is not used to address this limitation rather the Joffe prior art is used.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

/Charles E Anya/

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